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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,281	01/10/2002	Aditi Bajoria	AUS920011007US1	2244
35525	7590	09/28/2004	EXAMINER	
IBM CORP (YA)			LOHN, JOSHUA A	
C/O YEE & ASSOCIATES PC				
P.O. BOX 802333				
DALLAS, TX 75380			ART UNIT	PAPER NUMBER
			2114	

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/045,281	BAJORIA ET AL.
	Examiner	Art Unit
	Joshua A Lohn	2114

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 10 January 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-45 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 10 January 2002 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Applicant is advised that should claim 2 or 17 be found allowable, the respective claim 13 or 28 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11, 13-14, 16-26, 28-29, 31-41, 43, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pang et al., United States Patent number 6,493,837, filed July 16, 1999, in view of Gaudet et al., United States Patent number 6,543,010, filed February 24, 1999.

As per claim 1, Pang discloses a method in a logically partitioned data processing system (Pang, col. 5, lines 10-15, where the logical partitioning is the association of buffers and processors), said logically partitioned data processing system including a plurality of processors (Pang, col. 4, lines 49-50), said method comprising the steps of: encountering an event in one of said plurality of processors; storing data in a trace buffer associated with said event (Pang, col. 6, lines 50-57); and storing contents of said trace buffer prior to said data being overwritten (Pang, col. 5, lines 11-25). Pang fails to disclose the events being errors and the logs being preserved in the event of a partition crash.

Gaudet discloses preserving trace data after a partition crash due to an unrecoverable error (Gaudet, col. 3, lines 35-40), and saving the associated data that occurs in the event of an error (Gaudet, col. 3, lines 42-51).

It would have been obvious to one skilled in the art at the time of the invention to use the system of Pang in response to the events described by Gaudet.

This would have been obvious because Pang discloses an extensive trace system to allow the user to view performance data in the situation of particular events (Pang, col. 2, lines 30-35). Gaudet discloses a system to view the performance state in the event of an uncorrectable error (Gaudet, col. 3, lines 35-40). It would have been obvious to one skilled in the art that the event monitoring of Pang would have benefited, in its desired goal of evaluating the load and situations able to be handled by a computer system (Pang, col. 1, lines 10-20), by having the ability to successfully maintain the tracing system even in the event of an uncorrectable error, such as those able to be handled by Gaudet (Gaudet, col. 3, lines 35-51).

As per claim 2, Pang and Gaudet disclose the step of encountering an error further comprises the step of encountering an unrecoverable error in said one of said plurality of processors (Gaudet, col. 3, lines 42-51).

As per claim 3, Pang and Gaudet disclose the step of storing said contents of said trace buffer in non-volatile storage prior to said data being overwritten (Pang, col. 5, lines 16-18).

As per claim 4, Pang and Gaudet disclose the steps of: encountering said error; and storing a keyword with said data in said trace buffer (Pang, col. 6, lines 55-57, where the keyword is the transaction type indicator of an event).

As per claim 5, Pang and Gaudet disclose the step of storing contents of said trace buffer in response to a detection of said keyword in said contents of said trace buffer (Pang, col. 6, lines 55-57, where each keyword is written in response to an event, and Gaudet, col. 3, lines 41-50, where the event is an uncorrectable error that results in the storage of the volatile memory states).

As per claim 6, Pang and Gaudet disclose the steps of: encountering said error; servicing said error (Gaudet, col. 3, lines 36-50, where the error is serviced by the response); and storing a keyword with said data in said trace buffer during said servicing of said error (Pang, col. 6, lines 55-57, where the keyword is the transaction type indicator of an event).

As per claim 7, Pang and Gaudet disclose the step of rebooting said one of said plurality of partitions after said storage of said keyword (Gaudet, col. 3, lines 46-52, where the servicing of the error includes the rebooting the offending system, and this would coincide with the storage of the keyword in Pang).

As per claim 8, Pang and Gaudet disclose the steps of: providing a trace facility, said trace facility for receiving trace data and writing trace data to said trace buffer; and storing data in a trace buffer associated with said error utilizing said trace facility (Pang, col. 6, lines 50-57, where the buffer includes any related transaction event information, including error events like those of Gaudet).

As per claim 9, Pang and Gaudet disclose the steps of: receiving data to be stored in said trace buffer; determining whether said data includes a keyword (Pang, col. 6, lines 50-57, where the stored events will include a keyword describing them); and in response to a determination that said data includes said keyword, copying contents of said trace buffer (Gaudet, col. 3, lines 41-50, where if the keyword event is an uncorrectable error the contents of volatile buffers are copied).

As per claim 10, Pang and Gaudet disclose step of: providing a trace facility, said trace facility for receiving trace data and writing trace data to said trace buffer; receiving data, utilizing said trace facility, to be stored in said trace buffer; determining, utilizing said trace facility, whether said data includes a keyword (Pang, col. 6, lines 50-57, where the stored event will include a keyword describing the type); and in response to a determination that said data includes said keyword, copying, utilizing said trace facility, contents of said trace buffer (Gaudet, col. 3, lines 41-50, where if the keyword event is an uncorrectable error, the contents of volatile buffers would be copied).

As per claim 11, Pang and Gaudet disclose the step of resetting, utilizing said trace facility, pointers to a top of said trace buffer, wherein data to be stored in said trace buffer is

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stored starting at said top of said trace buffer (Pang, col. 6, lines 26-30, where an empty buffer would have no offset, thus starting storage at the top of the buffer).

As per claim 13, Pang and Gaudet disclose the step of encountering an error in one of said plurality of processors further comprises the step of encountering an unrecoverable error (Gaudet, col. 3, lines 42-51).

As per claim 14, Pang and Gaudet disclose the step of a partition controlled by said one of said plurality of processors crashing in response to said unrecoverable error (Gaudet, where it is inherent in the definition of an unrecoverable error that the associated partition is unable to continue execution and crashes).

As per claims 16-26, 28, and 29, these claims are merely a means for doing the methods of claims 1-11, 13, and 14, and are rejected under the same grounds as mentioned above.

As per claims 31-41, 43, and 44, these claims are merely a computer product means for executing the methods of claims 1-11, 13, and 14, and are rejected under the same grounds as mentioned above based upon the disclosure that the methods above can be either hardware or software (Pang, col. 9, lines 14-16).

Claims 12, 15, 27, 30, 42, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pang in view of Gaudet, in further view of the Microsoft Computer Dictionary, fourth edition, published 1999.

As per claim 12, Pang and Gaudet disclose the steps of: servicing said error; during said servicing, transmitting data to a trace facility to be stored in said trace buffer, said data being

associated with said error; including with said data a keyword; completing said servicing of said error (Pang, col. 6, lines 50-57, where the stored event will include a keyword describing the type, and Gaudet, col. 3, lines 36-50, where the error is serviced by the response). Pang and Gaudet fail to disclose the use of an exception handler routine in the servicing of the error.

Microsoft Computer Dictionary discloses that exception handling is a situation in which a separate routine must be used to deal with a problem in the conditions of the system (Microsoft Computer Dictionary, page 173).

It would have been obvious to one skilled in the art at the time of the invention to use in exception handling routine to deal with the uncorrectable data error in the system of Pang and Gaudet.

This would have been obvious because Gaudet discloses using a separate routine to that which is executing when dealing with the uncorrectable error problem (Gaudet, col. 3, lines 41-50, where the diskdump driver is the separate routine). By the definition, provided by the Microsoft Computer Dictionary, this use of the diskdump driver is an exception handling routine for the problem of an uncorrectable error problem, and is being utilized to service the error as seen by Pang and Gaudet.

As per claim 27, this claim is merely a means for implementing the methods of claim 12, and is rejected under the same grounds as mentioned above.

As per claim 42, this claim is merely a computer product means for executing the methods of claim 12, and is rejected under the same grounds as mentioned above based upon the

disclosure that the methods above can be either hardware or software (Pang, col. 9, lines 14-16).

As per claim 15, Pang discloses a method in a logically partitioned data processing system (Pang, col. 5, lines 10-15, where the logical partitioning is the association of buffers and processors), said logically partitioned data processing system including a plurality of processors (Pang, col. 4, lines 49-50), said method comprising the steps of: encountering in event in one of the processors (Pang, col. 6, lines 50-57). Pang fails to disclose the event being an error and the servicing of the error.

Gaudet discloses preserving trace data after a partition crash due to an unrecoverable error (Gaudet, col. 3, lines 35-40), and saving the associated data that occurs in the event of an error (Gaudet, col. 3, lines 42-51). Gaudet discloses the servicing of the error (Gaudet, col. 3, lines 36-50, where the error is serviced in the response to the error condition).

It would have been obvious to one skilled in the art at the time of the invention to use the system of Pang in response to the events described by Gaudet.

This would have been obvious because Pang discloses an extensive trace system to allow the user to view performance data in the situation of particular events (Pang, col. 2, lines 30-35). Gaudet discloses a system to view the performance state in the event of an uncorrectable error (Gaudet, col. 3, lines 35-40). It would have been obvious to one skilled in the art that the event monitoring of Pang would have benefited, in its desired goal of evaluating the load and situations able to be handled by a computer system (Pang, col. 1, lines 10-20), by having the ability to

successfully maintain the tracing system even in the event of an uncorrectable error, such as those able to be handled by Gaudet (Gaudet, col. 3, lines 35-51).

The combined invention of Pang and Gaudet disclose the additional steps of during said servicing, transmitting error data to a trace facility to be stored in said trace buffer, said error data being associated with said error; including with said error data a keyword; completing said servicing of said error (Pang, col. 6, lines 50-57, where the stored event will include a keyword describing the type, and Gaudet, col. 3, lines 36-50, where the error is serviced by the response); providing said trace facility, said trace facility for receiving trace data and writing trace data to said trace buffer; receiving said error data, utilizing said trace facility, to be stored in said trace buffer; determining, utilizing said trace facility, whether said error data includes a keyword (Pang, col. 6, lines 50-57, where the stored event will include a keyword describing the type); in response to a determination that said error data includes said keyword, copying, utilizing said trace facility, contents of said trace buffer (Gaudet, col. 3, lines 41-50, where if the keyword event is an uncorrectable error, the contents of volatile buffers would be copied); and resetting, utilizing said trace facility, pointers to a top of said trace buffer wherein data to be stored in said trace buffer is stored starting at said top of said trace buffer (Pang, col. 6, lines 26-30, where a saved buffer is flushed, resulting in an empty buffer that would have no offset, thus starting storage at the top of the buffer). Pang and Gaudet fail to disclose providing an exception handler routine for the servicing of the error.

Microsoft Computer Dictionary discloses that exception handling is a situation in which a separate routine must be used to deal with a problem in the conditions of the system (Microsoft Computer Dictionary, page 173).

It would have been obvious to one skilled in the art at the time of the invention to use in exception handling routine to deal with the uncorrectable data error in the system of Pang and Gaudet.

This would have been obvious because Gaudet discloses using a separate routine to that which is executing when dealing with the uncorrectable error problem (Gaudet, col. 3, lines 41-50, where the diskdump driver is the separate routine). By the definition, provided by the Microsoft Computer Dictionary, this use of the diskdump driver is an exception handling routine for the problem of an uncorrectable error problem, and is being utilized to service the error as seen by Pang and Gaudet.

As per claim 30, this claim is merely a means for implementing the methods of claim 15, and is rejected under the same grounds as mentioned above.

As per claim 45, this claim is merely a computer product means for executing the methods of claim 15, and is rejected under the same grounds as mentioned above based upon the disclosure that the methods above can be either hardware or software (Pang, col. 9, lines 14-16).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is provided on form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua A Lohn whose telephone number is (703) 305-3188, until October 15, 2004, at which time the number will be (571) 272-3661. The examiner can normally be reached on M-F 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoleil can be reached on (703) 305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAL



SCOTT BADERMAN
PRIMARY EXAMINER